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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, HAI V

ART UNIT PAPER NUMBER

2142

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,801

Applicant(s)

BARETZKI, LAURENT

Examiner

Hai V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/27/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the communication received on 06 December 2004.
2. Claims 1-16 are cancelled.
3. Claims 17-42 are new and presented for consideration.

Response to Arguments

4. Applicant's arguments received on 06 December 2004 have been fully considered but they are not deemed to be persuasive. Applicant's arguments are deemed moot in view of the following new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (*i.e., canceling all claims and adding new claims*) to the claims which significantly affected the scope thereof.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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6. Claims 17-42 are rejected under 35 U.S.C. 102(e) as being anticipated by **Kanekar et al. U.S. patent # 6,751,191 B1.**

7. As to claim 17, Kanekar, Load Sharing And Redundancy Scheme, discloses a redundant routing system, comprising:

a first routing unit (Fig. 3, item R1) configured to manage input and output data;

a second routing unit (Fig. 3, item R2) configured to manage input and output data;

a network interface (Fig. 3, items 206-1, 206-2, 206-3) connecting said first and second routing units;

a standby bus interface (Fig. 9, line between item 914 and 916) connecting said first and second routing units to each other;

wherein, when said first routing unit is managing said input and output data, said second routing unit is configured to detect a failure of said first routing unit by monitoring both said network and standby bus interfaces; and

wherein, when said second routing unit detects a failure of said first routing unit, said second routing unit is configured to deactivate said first routing unit so that said first routing unit no longer manages said input and output data and said second routing unit is further configured to start managing said input and output (*Kanekar, Since both the slave and the master are independent operational routers, they may each come to different routing decisions. As a result, the slave and the master each maintains its own set of forwarding engine tables. Since the slave and the master share the same set of interfaces, the slave may observe incoming and outgoing packets and therefore obtains information to update its layer 2 and layer 3 tables. More particularly, prior to failure of*

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the master, the master monitors all traffic entering the switch during active forwarding of packets while the slave monitors all traffic entering the switch while the slave is in standby mode. Thus, while the master's forwarding engine is actively forwarding packets, the slave is learning information from the bus (e.g., incoming packets). Once the master fails, the slave actively forwards packets and monitors all traffic coming into the switch, as the master did prior to its failure, col. 14, lines 14-29).

8. As to claim 18, Kanekar discloses, wherein said first and second routing units have identical functions and include identical software and configuration files (*Kanekar, col. 4, lines 25-27; col. 6, lines 40-61*).

9. As to claim 19, Kanekar discloses, further comprising at least one serial link connecting said first and second routing units to at least one other system (*Kanekar, Fig. 1, serial link to client 210 system; Fig. 5, serial link to VLANs system*).

10. As to claim 20, Kanekar discloses, wherein said at least one serial link comprises at least one Y-split cable (*Kanekar, Fig. 15, line between 1468-1415, col. 17, lines 36-56*).

11. As to claim 21, Kanekar discloses, when said first routing unit detects a failure in itself, said first routing unit is configured to deactivate itself to cease managing said input and output data and allow said second routing unit to start managing said input and output data (*Kanekar, Figs. 12, 14; col. 11, line 55 – col. 12, line 55*).

12. As to claim 22, Kanekar discloses, wherein said first routing unit deactivates itself and activates said second routing unit by a change (*back plane signal*) in an impedance

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of at least one input/output serial port (*Kanekar, Figs. 12, 14; col. 11, line 55 – col. 12, line 55*).

13. As to claim 23 Kanekar discloses, wherein the change in impedance imparts putting said at least one input/output serial port in a high impedance state (*port is blocked*) (*Kanekar, Figs. 12, 14; col. 10, lines 60-65; col. 11, line 55 – col. 12, line 55*).

14. As to claim 24, Kanekar discloses, wherein said second routing unit deactivates said first routing unit by sending a reset command to said first routing unit via the standby bus, said reset command executing a reset algorithm on said first routing unit (*Kanekar, Figs. 12, 14; col. 11, line 55 – col. 12, line 55*).

15. As to claim 25, Kanekar discloses, wherein polling messages are exchanged via said network and standby bus interfaces, said polling messages carrying information relevant to detecting said failure (*Kanekar, Fig. 5, col. 7, lines 17- 48*)

16. As to claim 26, Kanekar discloses, wherein said second routing unit detects said failure of said first routing unit when said polling messages are not properly responded to on at least one of said network and standby bus interfaces (*Kanekar, Figs. 12, 14; col. 11, line 55 – col. 12, line 55; col. 8, lines 9-14*).

17. As to claim 27, Kanekar discloses, wherein sets of parameters necessary to interpret the polling messages, comprising the messages themselves, at least one transmission interval between the messages, and at least one time limit between two messages (*port states indicating the link up or down, delay time*), are stored in at least one configuration file contained in both said first and second routing units (*Kanekar, Fig.*

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11, col. 10, lines 54-65; Figs. 12, 14; col. 11, line 55 – col. 12, line 55; col. 8, lines 9-14).

18. As to claim 28, Kanekar discloses, wherein, when launching an application on said first and second routing units, a set of parameters appropriate to said application is loaded into a random access memory (RAM) (*Kanekar, Fig. 15, item 1462; col. 17, lines 14-56*).

19. As to claim 29, Kanekar discloses, wherein said network interface links said first and second routing units with at least one remote client system (*VLAN system*).

20. As to claim 30, Kanekar discloses, wherein said network interface is the Internet (*Kanekar, col. 17, lines 14-56*).

21. As to claim 31, Kanekar discloses, wherein said network interface is an Ethernet network (*Kanekar, col. 17, lines 14-56*).

22. As to claim 32, Kanekar discloses, wherein said network interface is a digital local area network (LAN) (*Kanekar, col. 17, lines 14-56*).

23. As to claim 33, Kanekar discloses, wherein said first and second routing units operate in Open Communication Processor (OCP) mode (*Kanekar, col. 17, lines 14-56*).

24. As to claim 34, Kanekar discloses, further comprising an alert protocol to warn of a possible failure of the system (*back plan signal*).

25. As to claim 35, Kanekar discloses, wherein said first and second routing units are data routers (*Kanekar, Figs. 14*).

26. As to claim 36, Kanekar discloses, wherein said first and second routing units are data servers (*Kanekar, Figs. 14*).

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27. As to claim 37, Kanekar discloses, wherein, after said second routing unit is activated and starts managing input and output data, said first routing unit is configured to detect a failure of said second routing unit (*Kanekar, Figs. 12B*).

28. As to claim 38, Kanekar discloses, wherein, when said first routing unit detects a failure in itself, said first routing unit is configured to deactivate itself to cease managing said input and output data and allow second routing unit to start managing said input and output data (*Kanekar, Figs. 14*).

29. Claim 39 is corresponding system in means plus function of claim 17; therefore, it is rejected under the same rationale as in claim 17.

30. Claims 40-42 have similar limitation of claims 19, 21, 25; therefore, they are rejected under the same rationale as in claim 19, 21, 25.

31. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

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Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

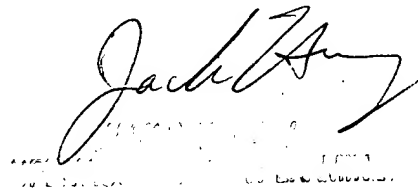
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 571-272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 571-272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai V. Nguyen
Examiner
Art Unit 2142



Jack H. Nguyen
Examiner
Art Unit 2142